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10/747,646	12/29/2003	Jasvantrai Shah	RIC99067	5723
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VERIZON PATENT MANAGEMENT GROUP 1515 N. COURTHOUSE ROAD SUITE 500 ARLINGTON, VA 22201-2909			EXAMINER STAMBOVSKY, HIBRET A	
			ART UNIT 4181	PAPER NUMBER
			NOTIFICATION DATE 11/14/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

## Office Action Summary

Application No.

10/747,646

Applicant(s)

SHAH, JASVANTRAI

Examiner

Hibret A. Stambovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,6,11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Afferton et al. (6,278,689).

Considering claim 1, Afferton discloses in a network including a router and an **optical cross-connect system (OXC)**(See Abstract line 1-13, Col. 5 line 5-15), a method for **responding to a failure** (See Abstract line 1-13, Col. 5 line 5-20 i.e. **method for responding to failure**), the method comprising: detecting the failure by **the router** (See Abstract line 1-13, Col. 1 line 65-67 and Col.2 line 1-13 i.e. **detecting the failure by a centralized traffic monitoring system which is a router**); sending a signal from the router to the OXC(See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 5-15 i.e. **optical path linked to the OXC from the router which is the monitoring unit**), wherein the signal indicates the failure and causes the OXC to connect a protection port(See Abstract 1-13 i.e. protection path) to a working port (**See Col. 5 line 40-50, Abstract 1-13 i.e. the OXC in response to the command from the alarm and restoration system restore the service path which is the working path**); and

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transmitting data from the router to the OXC over the protection port(See Col. 1 line 65-67 and Col.2 line 1-32, Col 4 line 63-67, Col. 5 line 1-15 i.e. transmitting data through the protection path).

Considering claim 6, Afferton discloses, a method for responding to a failure in a network including a router and an optical cross-connect system (OXC) (See Abstract line 1-15, Col. 1 line 65-67 and Col.2 line 1-13, Col. 3 line 6-17, Col. 5 line 50-60 i.e. a method of responding to a failure including router and OXC), the method comprising: receiving a signal at the OXC from the router (See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 5-15 and line 30-50, Abstract 1-13 i.e. receiving signal from the router which is the monitoring unit to an the OXC), the signal indicating the failure(See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 5-15 and line 40-50, Abstract 1-13 i.e. the OXC receives signal i.e. receiving signal from the router which is the monitoring unit to an the OXC); and connecting a protection port of the router to a working port of the OXC(See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 5-15 and line 40-50, Abstract 1-13 i.e. the OXC restoring the working signal).

Considering claim 11, Afferton discloses an optical cross-connect system comprising: a spare port for transmitting low priority data from a router (See Abstract 1-13, Col. 3 line 6-18 i.e. optical protection path as a spare path to transmit data only in case of failure at the working port); and a working port for transmitting high priority data from a primary router (See Abstract 1-13, Col. 3 line 6-18 i.e. Optical service path as a primary data transmitting line), the working port connectable to the router responsive to a failure of the primary router(See Col. 1 line 65-67 and Col.2 line

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**1-32, Col. 5 line 5-15 and line 40-50, Abstract 1-13 i.e. receiving signal from the router which is the monitoring unit to an the OXC).**

Considering claim 12, Afferton discloses the optical cross-connection system of claim 11, wherein the working port is connectable to the router responsive to receiving an in-band signal from the router router (**See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 5-15 and line 40-50, Abstract 1-13 i.e. the working port which is the service path is connectable to the router which can be the alarm and restoration system in response of receiving signal from the router).**

Considering claim 13, Afferton discloses the optical cross connection system of claim 12, wherein the working port is connectable to the router responsive to receiving a Synchronous Optical Network (SONET) signal from the router (**See Col. 1 line 11-17 i.e. working port which is the service path connect to the router).**

Considering claim 14, Afferton teaches the optical cross-connection system of claim 11, wherein the working port is connectable to the router responsive to receiving an out-of-band signal from the router (**See Abstract 1-13, Col. 5 line 38-50 i.e. the service port which is the working port is connectable to the router which is the monitoring unit).**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afferton et al. (6,278,689) in view of Wang et al. (6,813,241).

Considering claim 15, Afferton discloses an optical cross-connect system (OXC) for receiving the data from the router (**See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 5- 15 and line 42-50 i.e. optical path linked to the OXC from the router which is the monitoring unit**), the optical cross-connect system comprising a working port (**See Col. 5 line 32-50, Fig. 6 i.e. the optical cross-connect system comprising a service port which is a work port**), the working port connectable to the protection port, responsive to the failure of the working port of the router(**See Col. 1 line 65-67 and Col.2 line 1-32, Col. 5 line 32-50, Fig. 6 i.e. the optical service path which is the working port is connectable to optical protection path incase of failure in the working port**).

Afferton does not specifically disclose a communications network for transmitting data, the communication network comprising: a router for receiving the data from a terminal, the router comprising: a working port for receiving the data from the terminal; and a protection port for receiving the data from the terminal, responsive to a failure of the working port.

Wang teaches a communications network for transmitting data (**See Col. 1 line 16-20 i.e. a data network for transmitting data from one location to another**), the communication network comprising: a router for receiving the data from a terminal (**See**

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**Abstract 1-14 i.e. the network including a router), the router comprising: a working port for receiving the data from the terminal (See Abstract 1-14 i.e. the router includes working and protection data port for receiving and transmitting signals); and a protection port for receiving the data from the terminal (See Abstract 1-14 i.e. the router includes working and protection data port for receiving and transmitting signals), responsive to a failure of the working port(See Col. 1 line 7-12 i.e. switching from working data port to a protection data port in case of failure in the network);**

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and modify a router to comprise a working port for receiving the data from the terminal; and a protection port for receiving the data from the terminal, responsive to a failure of the working port, as taught by Wang, thus allowing more efficient data transmission, as discussed by Wang (**col. 2 lines 25-30**).

Considering Claim 16 Afferton discloses the communications network of claim 15, wherein the router transmits a signal indicating the failure to the OXC, the signal causing the OXC to connect the protection port to the working port of the OXC (**See Col. 5 line 32-50 i.e. incase of failure the router sends a command to the OXC indicating a failure. The OXC connects the optical service path that is the working path to the protection path**).

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3. Claims 2-5,7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afferton et al. (6,278,689) in view of Ramaswami et al. (6,792,174).

Considering claim 2 Afferton does not specifically disclose the step of sending an in-band signal to the OXC.

Ramaswami teaches, the step of sending an in-band signal to the OXC (**See Col. 13 line 26-31 i.e. OXC uses in-band communication channel**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and include the step of sending an in-band signal to the OXC, as taught by Ramaswami, thus allowing effective signaling information between OXC system and attached network equipment, as discussed by Ramaswami (**col. 2 lines 60-62**).

Considering claim 3 and 8 Afferton does not specifically disclose, wherein the sending an in-band signal to the OXC further comprises the sending a Synchronous Optical Network (SONET) signal to the OXC (**See Col. 12 line 37-46, Col. 13 line 27-37, Fig. 13 i.e. The in-band signal transmit between the ANT and OXC includes SONET signal**).

Ramaswami teaches, wherein the sending an in-band signal to the OXC further comprises the sending a Synchronous Optical Network (SONET) signal to the OXC (**See Col. 12 line 37-46, Col. 13 line 27-37, Fig. 13 i.e. The in-band signal transmit between the ANT and OXC includes SONET signal**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, wherein the sending an in-band signal to the OXC



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further comprises the sending a Synchronous Optical Network (SONET) signal to the OXC, as taught by Ramaswami, thus allowing effective signaling information between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-51**).

Considering claim 4 Afferton does not specifically disclose, the method of claim 1, wherein the sending further comprises sending an out-of-band signal to the OXC Ramaswami teaches, the method of claim 1, wherein the sending further comprises sending an out-of-band signal to the OXC (**See Abstract line 1-11, Col. 13 line 24-27 i.e. OXC communicates using out-of-band signaling**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and sending an out-of-band signal to the OXC, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

Considering claim 5 Afferton does not specifically disclose, the method of claim 4, wherein the sending an out-of-band signal comprises the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC.

Ramaswami teaches, the method of claim 4, wherein the sending an out-of-band signal comprises the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC (**See Col. 13 line 44-49 and line 58-65, Col 15 line 50-67 i.e. communicating an Out-of-band signal comprises addressing the out-of-band signal to an internet protocol associated with OXC**).

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It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and include the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

Considering claim 7 Afferton does not specifically disclose, the method of claim 6, wherein the receiving further comprises receiving an in-band signal at the OXC. Ramaswami teaches, the method of claim 6, wherein the receiving further comprises receiving an in-band signal at the OXC (**See Col. 13 line 26-31 i.e. OXC uses in-band communication channel**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and include the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

Considering claim 9 Afferton does not specifically disclose, the method of claim 6, wherein the receiving further comprises receiving an out-of-band signal at the OXC. Ramaswami teaches, the method of claim 6, wherein the receiving further comprises receiving an out-of-band signal at the OXC (**See Col. 13 line 58-65, Col 15 line 50-67 i.e. Communicating out-of-band signal at the OXC**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and receive an out-of-band signal at the OXC, as

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taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

Considering claim 10 Afferton does not specifically disclose, the method of claim 9, wherein the receiving an out-of-band signal further comprises addressing the out-of-band signal to an Internet Protocol address associated with the OXC Ramaswami teaches, the method of claim 9, wherein the receiving an out-of-band signal further comprises addressing the out-of-band signal to an Internet Protocol address associated with the OXC (**See Col. 13 line 44-65, Col 15 line 50-67 i.e. Communicating out-of-band signal at the OXC. Also communicating an Out-of-band signal comprises addressing the out-of-band signal to an internet protocol associated with OXC**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and addressing the out-of-band signal to an Internet Protocol address associated with the OXC, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

4. Claims 17, 18, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afferton et al. (6,278,689) in view of Wang et al. (6,813,241) further in view of Ramaswami et al. (6,792,174).

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Considering claim 17 Afferton does not specifically disclose, the communications network of claim 16, wherein the signal is an in-band signal

Ramaswami teaches, the communications network of claim 16, wherein the signal is an in-band signal (**See Col. 13 line 26-31 i.e. the communication signal is an in-band signal**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and addressing the out-of-band signal to an Internet Protocol address associated with the OXC, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

Considering claim 18 Afferton does not specifically disclose, the communications network of claim 17, wherein the in-band signal is a Synchronous Optical Network (SONET) signal

Ramaswami teaches, the communications network of claim 17, wherein the in-band signal is a Synchronous Optical Network (SONET) signal (**See Col. 12 line 37-46, Col. 13 line 27-37, Fig. 13 i.e. The in-band communication channel transmit signals that include SONET between the ANT to the OXC**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and change the in-band signal to a Synchronous Optical Network (SONET) signal, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

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Considering claim 19 Afferton does not specifically disclose, the communications network of claim 16, wherein the signal is an out-of-band signal

Ramaswami teaches the communications network of claim 16, wherein the signal is an out-of-band signal **(See Col. 15 line 5-17 i.e. the signal sent from the controlling unit to the OXC is an out-of-band signal).**

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and the communications network of claim 16, wherein the signal is an out-of-band signal, as taught by Ramaswami, thus allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami **(Col. 12 lines 49-67).**

Considering claim 20 Afferton does not specifically disclose, the communications network of claim 19, wherein the out-of-band signal is addressed to an Internet Protocol address associated with the OXC.

Ramaswami teaches, the communications network of claim 19, wherein the out-of-band signal is addressed to an Internet Protocol address associated with the OXC **(See Col. 13 line 44-46, Col 15 line 50-67 i.e. communicating an Out-of-band signal comprises addressing the out-of-band signal to an internet protocol associated with OXC).**

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Afferton, and wherein the out-of-band signal is addressed to an Internet Protocol address associated with the OXC, as taught by Ramaswami, thus

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allowing effective information transmission between OXC system and attached network equipment, as discussed by Ramaswami (**Col. 12 lines 49-67**).

### ***Conclusions***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hibret A. Stambovsky whose telephone number is 5712705145. The examiner can normally be reached on Monday to Thursday from 8:00 a.m. - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 5712727876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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